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ABSTRACT

This paper briefly presents ideas and techniques that can facilitate effective whitewater kayaking instruction. Instructors often focus so much on the mechanics of specific skills that they overlook less obvious, but equally important, aspects of instruction. These aspects include the underlying purposes and guiding principles of kayaking instruction. Students' progression in learning and success in kayaking may depend on the teacher's knowledge of and ability to communicate these aspects. Sections of this report cover ice breakers, stretching exercises, orientation to the equipment, students' level of comfort or fear under water, wet exits from the kayak, proper posture, the Eskimo rescue, the instructor rescue, forward strokes, the sweep stroke, the stern draw, the Eskimo roll, and issues of risk and student judgment. A resource section lists seven books and six videos on whitewater kayaking, with brief annotations. (SV)



Whitewater Kayaking Instruction:

Skills and Techniques

Raymond Poff Tom Stuessy

14th Annual International Conference on Outdoor Recreation & Education

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WHITEWATER KAYAKING INSTRUCTION: SKILLS AND TECHNIQUES

Raymond Poff Tom Stuessy

ABSTRACT: This paper is an attempt to very briefly communicate ideas that can help facilitate effective kayaking instruction. It covers such topics as: remembering the less obvious aspects of instruction, progression, ice breakers, stretching, equipment orientation, underwater comfort, wet exits, posture, eskimo rescues, instructor rescue, Eskimo rolls, forward strokes, sweep strokes, stern draw, and risk/judgment.

Learning how to kayak and how to be an effective kayak instructor is an on-going process of learning from personal experience, other kayakers, instructors, and excellent books and videos. In light of this, the authors would like to say that they are still actively engaged in the learning process and are by no means experts in kayaking, kayaking instruction, or writing. We would like to extend a special thanks to the ACA Whitewater Kayaking instructor trainers, friends, family, and others who have enabled us to become better kayakers and instructors.

About the ICORE Presentation

The purpose of the hands-on session was to explore avenues in teaching whitewater kayaking techniques. Topics such as teaching progression, stretching techniques, boat fitting, strokes, eskimo roll, and rescues were covered. Ideas were solicited from the attendees after a demonstration of each skill and discussions were generated on the different techniques.

Remember the Less Obvious

Instructors often focus so much on details related to teaching the mechanics of specific skills that they overlook less obvious, but equally important aspects. These aspects are the underlying purposes and guiding principles of kayak instruction. Be sure and remember that the students' progression in learning and success in kayaking may actually rest on an instructor's knowledge and ability to communicate these aspects.

Progression

Teaching progression is something every good kayaking instructor thinks about as he/she prepares for class. While it is one of the most important concepts of formal training, it is typically overlooked as instructors are trained to think of progression from a kayaking perspective. We as instructors know how we will teach the roll or an Eskimo rescue, but how many of us address formal introductions, ice breakers, the value of humility, or anxieties associated with getting into a boat for the first time?



Ice Breakers

This is a great way to get people familiar with each other and also to get them moving and laughing as a group. This can create camaraderie quickly and promote a "team effort" in an activity that is perceived very individualistic to many beginning boaters. Other progression ideas include formal introductions. We ask the participants to explain why they enrolled, identify an expectation for themselves as well as the group, and what their biggest anxiety is in regard to kayaking.

Stretching

Once the group has been introduced and hopefully laughed a little they need to stretch. Some creativity with stretching can serve the dual purpose of preventing injury and having some fun. The "finger dance" is an effective technique. All the participants are standing in a circle and start by holding out their arms and wiggling their fingers. The motion moves up the arms, through the neck, down the torso and finally the legs. The trick is to keep all movement going at the same time, which produces some strange looking and funny "dances". Furthermore, keep in mind the importance of hamstrings and encourage them to stretch before your course dates by including a small stretch routine in your information mailings to participants.

Equipment Orientation

This would, on the surface, seem straightforward. It is. However, it is also time consuming and something they can learn about and ask questions about during the course. Have them pre-read about as much about equipment as you can. This will serve more than one purpose. First it gives the students a chance to come armed with information releasing some anxiety and encourages an attitude that "I know a little about kayaking". Also, get creative! Have them each talk about an item of gear to the rest of the class. This will engage them as well as get to feel comfortable with each other.

Underwater Comfort

This less obvious aspect of underwater comfort is worth discussing. The ability of a student to remain calm and collected in and underwater will no doubt influence their overall comfort and confidence while kayaking. Students' first reaction when finding themselves inverted is to immediately bail out of the kayak. People don't breathe under water, so this is a natural reaction at first. Instructors need to ensure that each student is ok being in the water to begin with before getting into a kayak. This needs to be done so as to not embarrass anyone. One suggestion is to announce early in the class that if anyone has concerns with being in the water that they can talk with you when it seems appropriate to them, perhaps while other class members are getting equipment or adjusting kayak foot pegs. An assumption could be made that if someone signed up for a kayaking class that they were comfortable in water – this may not necessarily be true. They may in fact be taking the course to help overcome a fear of water.



Wet Exits

The purpose of the wet exit is to safely get out of the kayak when attempts at the eskimo roll or rescue fail to occur before running out of air or patience. When teaching the wet exit, it is helpful to have students go through the process on land before going upside down. Outline each step that the students need to follow. These could include: 1) tuck forward and kiss the boat deck; 2) hit the bottom of the kayak enthusiastically to announce that the kayaker is upside down; 3) count to five or ten using fingers (this helps to reinforce the fact that the student won't instantly run out of air); 4) slide hands forward along cockpit coaming to the grab loop;

Posture

Efficient paddling requires the practice of proper posture while in a kayak. Proper posture is generally considered to be sitting up straight or with a slight lean forward. An extreme lean toward the bow or stern inhibits torso rotation and balance, which is critical for proper and effective technique. In order to help teach this principle, try this activity. Have the students, while in their kayaks in the water (with paddles), lean all the way forward and rock their boats from side to side. Repeat this while leaning all the way back, and then while sitting up with good posture. Ask the students to describe how the rocking exercise differed in the three postures. Next have them lean all the way forward and try to model a forward stroke, emphasizing good torso rotation. Have them repeat this leaning all the way back and then sitting up. The students should quickly realize that extreme leans in either direction will reduce their ability to rotate their torso or to effectively balance their kayaks. Students that understand the importance of boat control and torso rotation will become better paddlers.

Eskimo Rescue

The eskimo rescue (also known as a bow rescue or T-rescue) is a skill in which many other important skills are used, such as the hip snap, loose hips, head down, and underwater comfort. Take the time to rehearse your dialog as an instructor and give simple, straightforward information. After a thoroughly narrated, well-demonstrated eskimo rescue i.e., both hands in the same direction (play 'Pac-Man' with your hands), calm and slow, head on the bow of rescue boat, not pushing down too hard on the rescue boat, and snapping hips keeping the head as low as you can, the instructors should take a student step by step through the rescue while the others continue to watch. Once they have a solid grasp of the mechanics, let them rescue each other. Letting them rescue each other provides an avenue to self-confidence, or at least another well-done wet exit.

Note: It is critical that instructors communicate the potential that exists for injury or even death while waiting underwater for a rescue. Emphasize that this rescue is best used in areas with deep water and few, if any, obstacles. If your program encourages student-to-student eskimo rescues on the river, do not forget to teach the importance of vision and looking for down stream hazards! There is no need for two rescuees!



Instructor Rescue

This rescue can be a very effective means of righting an overturned student in some circumstances. As with the bow rescue, safe water is usually best for using this technique. It can be utilized without students knowing that it might happen, but advising your students ahead of time will make it easier for you and them. Essentially, the instructor paddles up beside an overturned kayak and pushes down on one side and pulls up the other. Some differ on which side should be pushed and which should be pulled, pool practice will allow instructors to figure our their own preferences. To make rescue easier, a student should hug their kayak while underwater to help keep their center of gravity low.

Note: Please realize and communicate again the inherit risks in hanging out underwater waiting for a rescue. The student will need to learn to assess the river environment and make judgments accordingly.

Forward Strokes

The forward and sweep strokes are skills in kayaking that evolve. Some say the mechanics can be explained, but the practice of that skill will enable it to develop for the person using it. As with many strokes in kayaking, they become hybrids of other strokes in the "heat of the battle". This does not mean technique is sacrificed, it simply means strokes run together. Break the stroke down in to the catch, power, and recovery phases as you normally would. An analogy that we use is the "can in the refrigerator", which stresses the importance of the front rotation before the catch and power rotation phase. Whatever your beverage choice, reach to the back of the fridge for it while keeping your high hand on the freezer. This will remind them to use their torsos in both directions resulting in a full, efficient stroke.

Note: Stress vision. Your head follows your eyes, your body follows your head and your boat follows your body.

Sweep Stroke

Some ACA instructor trainers suggest that any stroke going past the hips becomes a sweep stroke. There is some debate about this, however, it is one way to distinguish between the sweep and the forward stokes. After a good rotation and catch phase encourage students to make a "rainbow" on the side of their boat. Paddle position is also very important. Forward strokes are often as vertical as possible, while sweeps are as horizontal as they can be. Slow and in control is the best sweep. Be insightful and break down what you do with your stoke on the river and remember what is was like to learn it. Do you use your hips to sweep? Is there more pressure on one leg than the other? Are you leaning? Be sure to explain why each stroke is used and promote good posture and vision all the while being the best "model" you can be. Students will mimic your technique. If it's good, they will be someday too.



Stern Draw

One of the most effective strokes to have in one's repertoire is a solid stern draw. Simply put, a stern draw is the last third of a sweep stroke. On a clock face, with the kayak bow being 12 and the stern being 6, a stern draw should be placed at approximately 4 or 7. The paddle blade should be perpendicular to the water and the lower body should be used to kick the back end of the kayak toward the paddle. The stern draw is an excellent tool for quickly correcting the kayak angle. One application is that of correcting the angle during a ferry. A stern draw on the downstream side of the kayak will correct the angle and allow the ferry to continue on course. The stern draw can also be converted to a rudder stroke to allow for long-term angle management on flat water.

Eskimo Roll

The eskimo roll is what most students come to a beginning kayaking class to learn. Learning is a progression. Don't fault and teach the roll too soon. A certain level of success comes with confidence and also past failure. Student must learn "how" to learn skills in their boats and from experience realize it comes with, for many, frustration. With the realization that this kayaking stuff isn't so easy, they'll be more receptive to new information when they don't pop the roll on the first time. A good progression makes the all mighty roll something worth working for and uses past successes as fuel.

Common instructor problems with the roll can haunt and cause unnecessary frustration for a first timer. Stress the importance of the first "C". As students roll out from the set up, instructors watch the paddle position, not the body position. Look down and see where their head is; it should almost break the surface. If the head is high, the body is wound up and ready to snap. Encourage students to arch their backs and really "reach" for it. Once the student is upright and breathing the precious air they missed for six seconds, look to see where their elbows are. Are they high, low, or uneven? The pool is great roll practice. However, it does not prepare anyone to be ready for what lies just down stream. Make sure when students pop up, they are in a position to paddle, protect, and brace. Another technique that we use is the towrope. Once the student is comfortable with the roll, we attach a rope to their boat and pull them through the water for resistance. This is as close you can get to a river situation.

Risk & Judgment

Instructors can't teach judgment to their students. The ability to make judgments is a process that is learned through experience over time. Instructors can, however provide reference points from which their students can begin to develop this ability. Some basic guidelines that have always proved beneficial were from a *Canoe and Kayak* magazine article (of which I don't remember citation for). The article was discussing judgment in relation to deciding whether or not to run a rapid. A series of questions is presented for self-reflection. They, in essence, included:

What are the moves required to successfully run this rapid?



65

Am I capable of making all of those moves today? If I fail to make those moves, what are the resulting consequences? Am I willing to accept those consequences?

These principles will assist students and instructors in assessing various paddling situations and begin to make decisions accordingly.

Conclusion

This is by no means a complete explanation of how to teach kayaking, but rather a few pointers and things to consider. There are many excellent instructors, friends, books, and videos to learn from. Learn as much as possible from others and be willing to spend the necessary time to perfect those kayaking skills.

Resources

The following is a <u>partial</u> list containing some of the better kayaking books and videos that kayakers and kayak instructors may find useful in improving their skills. This list does not include books and videos covering the area of playboating.

Books:

Ford, K., DeRiemer, P., & DeRiemer, M. (1998). <u>The Kayaker's Playbook</u>. Durango, CO: Performance Video.

Note: This book covers excellent skills and drills that can be used to fine-tune your paddling. It comes with a plastic crib sheet that you can take on the river with you while you work on perfecting your techniques. A must have!

Bennett, J. (1999). <u>The Essential Whitewater Kayaker: A Complete Course</u>. Camden, ME: Ragged Mountain Press.

Note: This is the text that we use when teaching academic kayaking courses. It is well written and adequately covers a wide range of information for the beginner, as well as the experienced boater. A good addition to any paddler's library.

Jackson, E. (1999). Whitewater Paddling: Strokes and Concepts. Mechanicsburg, PA: Stackpole Books.

Note: Eric does an excellent job in presenting kayaking skills and adding perspectives that most kayakers have not been exposed to. There is plenty to think about and to put into practice. This book is probably better suited for experienced paddlers looking to improve their skills than for the beginner.



Nealy, W. (1986). <u>Kayak: The Animated Manual of Intermediate and Advanced Whitewater Technique</u>. Birmingham, AL: Menasha Ridge Press.

Note: This classic book is humorous, as well as educational. Anyone who has read Nealy's book understands that there is far more to it than just cool cartoons.

Gullion, L. (1987). <u>Canoeing and Kayaking Instruction Manual</u>. Birmingham, AL: Menasha Ridge Press.

Note: This manual was written for and endorsed by the ACA for helping teach instruction techniques. Great information.

Gullion, L. (1996). <u>Kayak & Canoe Games</u>. Birmingham, AL: Menasha Ridge Press.

Note: This book is a companion to the American Canoe Association's Instruction Manual cited above. The games reinforce good paddling skills and help students to have fun.

Walbridge, C., & Sundmacher, W. A. (1995). Whitewater Rescue Manual: New Techniques for Canoeists, Kayakers, and Rafter. Camden. ME: Ragged Mountain Press.

Note: This text is comprehensive, easy to understand, and full of practical solutions to common mishaps that occur on the river. Another must have.

Videos:

Ford, K. (1992). The Kayaker's Edge. Durango, CO: Whitewater Instruction.

Note: A classic in kayak instruction resources that is by no means outdated. The beginner and the 'expert' will both likely find room for improvement while watching this video. Works great in a classroom setting.

Holt, J. (1995). Kayak 101: Mastering the Basics. Joe Holt Productions.

Note: This video does an excellent job of covering eddy turns/peel outs and basic water reading. The straightforward nature of the presentation makes it easy for students and instructors to use.

Ford, K. (2000). <u>Breakthru: Carving up Kayak Technique</u>: Durango, CO: Performance Video and Instruction, Inc.

Note: This brand new video for intermediate and advanced paddlers provides 50 drills that will assist paddlers in mastering basic and advanced techniques. Provides insight into paddling today's shorter kayak. If you want to improve your technique, this is the video for you.



Whiting, K., & Emerick, C. (2000?). <u>SOAR: Skills On All Rivers</u>. Clayton, ON: The Heliconia Press.

Note: This video addresses paddling skills in relationship to improving strokes, creek boating, and big water paddling. Covers aspects specific to paddling newer, shorter kayaks. This video was created with the intermediate and advanced paddler in mind.

Bonesteel, P., & DeCuir, T. (1996). <u>Essential Boat Control</u>. Topton, NC: WaterWorks.

Note: This video is all about kayaking body language - the relationship between your body and your kayak. A wide range of eddy turn/peel-out techniques is addressed giving paddlers a whole new perspective on making your kayak do what you want it to. Best suited for the intermediate to expert paddler.

Ford, K. (1998). Whitewater Self-Defense. Durango, CO: Performance Video and Instruction, Inc.

Note: A practical, no-nonsense approach to addressing rescue techniques. The video essentially promotes using techniques, which are simple, fast to employ, and effective. The video does not address complex drag systems; it focuses instead on avoiding the problem in the first place and what to try before having to use complex systems. This is also, an excellent resource for teaching basic group management skills and self-rescue techniques.

Biographical Sketches:

Raymond Poff is finishing a Ph.D. in Leisure Behavior at Indiana University. He is an Associate Instructor for the Department of Recreation and Park Administration, and also the equipment purchasing coordinator and an ACA Whitewater kayaking instructor for IU Outdoor Adventures. Prior to returning to graduate school, he was the Recreation Coordinator managing BYU Outdoors Unlimited in Provo, UT.

Tom Stuessy is the Assistant Leisure Programs Coordinator for the Indiana Memorial Union. He is an ACA kayaking instructor and recently began his coursework for a Ph.D. in Leisure Behavior. Prior to taking his current position, Tom coordinated the Freshman Wilderness Orientation Program at Western State College in Gunnison, CO. Tom is an avid skydiver and videographer and enjoys spending time in New Zealand.

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